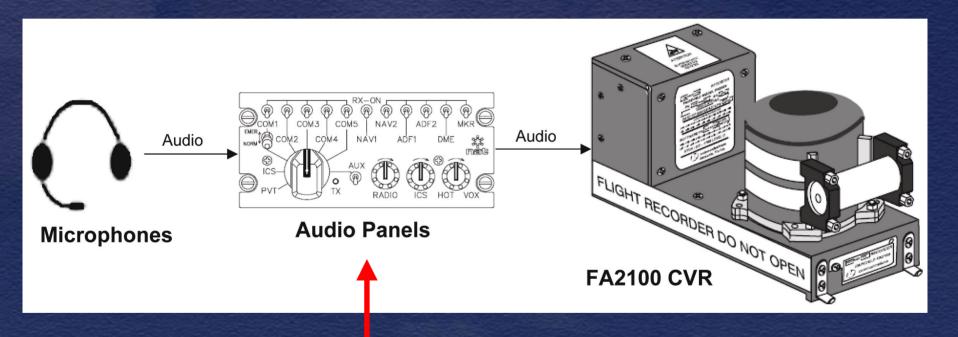


NTSB National Transportation Safety Board

Office of Research and Engineering

Preflight Testing and Maintenance Checks for Cockpit Voice Recorders

### **CVR System**



**Problem during installation** 



#### **CVR Audio**

- Four audio channels
  - Cockpit area microphone (CAM)
  - Pilot audio panel
  - Copilot audio panel
  - Audio panel for third crewmember
- No Federal requirement for fourth channel (for two-pilot aircraft)



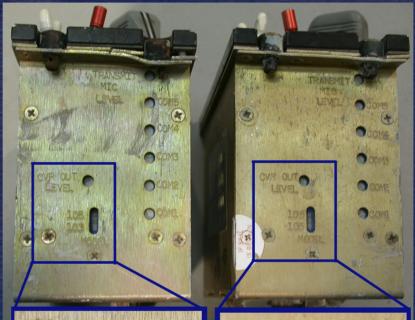
## **Accident Helicopter CVR**

- Pilot and copilot CVR channels did not contain any audio
- Audio from CAM was poor



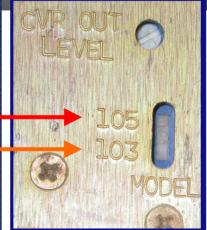
#### N579EH CVR System Installation

Side view of pilot audio panel



Side view of copilot audio panel

105 position103 position





105 position103 position



# **Critical CVR System Checks**

- CVR readout
  - Would have detected problem with helicopter CVR installation
  - Can be performed during periodic maintenance
- Audio check
  - Performed before first flight of day

